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SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 1852.216-78 Firm Fixed Price. (DEC 1988)

The total firm fixed price of this contract is \$_____.

(End of clause)

B.2 Supplies and/or Services to be Provided

The Contractor shall provide all resources (except as may be expressly stated in the contract as furnished by the Government) necessary to deliver and/or perform the items below in accordance with the Description/Specifications/Statement of Work incorporated into Section C of this contract.

Item No.	Description	Qty	Unit	Firm Fixed Price	Total Price
HARDWARE REQUIREMENTS:					
001	Material Prop (SOW HR-01)	2	EA		
002	SPRITE (SOW HR-02) (NASA to provide molds)	24	EA		
003	SPRITE TC Plug (SOW HR-02B) (Vendor to provide machined TPS only, no instrumentation)	24	EA		
004	MDU-Gore (SOW HR-03)	5	EA		
005	MDU-Nose (SOW HR-04)	2	EA		
DATA REQUIREMENTS:					
006	Heatshield Manufacturing Databook, DR-001. (SOW Section 5.0)	1	EA	\$_____	\$_____

(b) OPTION ITEMS

If Option Items are exercised pursuant to Clause 52.217-7, —OPTION FOR INCREASED QUANTITY – SEPARATELY PRICED LINE ITEM (incorporated by reference, Section I), the contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Description/Specification/Work Statement in Section C.

Item No.	Description	Qty	Unit	Firm Fixed Price	Total Price
007	Conformal TPS Material Properties, DR-002 (SOW Section 5.0)	1	EA	\$_____	\$_____

(End of clause)

[END OF SECTION B

SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.1 Specification/ Statement of Work.

The Contractor shall provide the item or services specified in Section B in accordance with the following:

Statement of Work (SOW), entitled “Conformal Ablative TPS Manufacturing Scale-Up,” which is incorporated as in Section J.1 as Attachment 1.

(End of text)

[END OF SECTION C]

SECTION D - PACKAGING AND MARKING

D.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION D

Clause(s) at the beginning of this Section is incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

1852.211-70 Packaging, Handling, and Transportation. (SEP 2005)

(End of clause)

[END OF SECTION D]

SECTION E - INSPECTION AND ACCEPTANCE

E.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION E

Clause(s) at the beginning of this Section are incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

52.246-2 Inspection of Supplies - Fixed Price. (AUG 1996)

52.246-7 Inspection of Research and Development - Fixed-Price. (AUG 1996)

52.246-16 Responsibility for Supplies. (APR 1984)

(End of clause)

E.2 1852.246-71 Government Contract Quality Assurance Functions. (OCT 1988)

In accordance with the inspection clause of this contract, the Government may intend to perform the following functions at the locations indicated:

	QUALITY ASSURANCE ITEM	QUALITY ASSURANCE FUNCTION	LOCATION
01	In-process	Inspection	Contractor and/or subcontractor facility
02	Test	Witness	Contractor and/or subcontractor facility
01	Receiving Inspection	Inspection	NASA Ames Research Center

(End of clause)

E.3 1852.246-72 Material Inspection and Receiving Report. (AUG 2003)

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series).

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.6. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of clause)

[END OF SECTION E]

SECTION F - DELIVERIES OR PERFORMANCE

F.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION F

Clause(s) at the beginning of this Section are incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

52.242-17 Government Delay of Work. (APR 1984)

52.247-34 F.O.B. Destination. (NOV 1991)

(End of clause)

F.2 Period of Performance.

The period of performance of this contract is date of award through TBD.

(End of clause)

F.3 Place of Performance.

The services to be performed under this contract shall be performed at the following location(s): the Contractor's facilities located at : TBD and at such other locations as may be directed by the Contracting Officer.

(End of clause)

F.4 Delivery and/or Completion Schedule.

The Contractor shall deliver and/or complete performance of the items required under this contract as follows:

Item No.	Description	Qty	Unit	Total Firm Fixed Price	Delivery / Acceptance Date
HARDWARE REQUIREMENTS:					
001	Material Prop (SOW HR-01)	2	EA	\$TBD	1/28/2013
002	SPRITE (SOW HR-02) (NASA to provide molds)	24	EA	\$TBD	1/28/2013
003	SPRITE TC Plug (SOW HR-02B) (Vendor to provide machined TPS only, no instrumentation)	24	EA	\$TBD	1/28/2013
004	MDU-Gore (SOW HR-03)	5	EA	\$TBD	5/31/2013
005	MDU-Nose (SOW HR-04)	2	EA	\$TBD	5/31/2013
DATA REQUIREMENTS:					
006	Heatshield Manufacturing Databook, DR-001. (SOW Section 5.0)	1	EA	\$TBD	7/31/2013
007	OPTION: Conformal TPS Material Properties, DR-002 (SOW Section 5.0)	1	EA	\$TBD	5/31/2013

(End of clause)

F.5 1852.247-72 Advance Notice of Shipment. (OCT 1988)

Five (5) work days prior to shipping material coupon items, the Contractor shall furnish the anticipated shipment date, bill of landing number (if applicable), and carrier identity to [COTR (TBD)] and to the Contracting Officer.

(End of clause)

F.6 DELIVERY INSTRUCTIONS

(a) The Contractor shall ship the items required under this contract to:

NASA Ames Research Center
PO Box 1
Moffett Field, CA 94035-0001
Marked for: TBD
Contract Number: TBD
Organization/Office Code: TBD
Building No.: TBD

(b) Unless otherwise authorized in advance by the Contracting Officer, deliveries under this contract shall be made between the hours of 8:00a.m. and 5:00 p.m., Monday through Friday, excluding Federal holidays.

(c) Additional delivery instructions: None

(d) Additional marking instructions: None

(End of clause)

F.7 ARC 52.249-90 Notice of Delay. (FEB 1997)

If, because of technical difficulties, the Contractor becomes unable to complete the contract work at the time specified, notwithstanding the exercise of good faith and diligent efforts in performing the work called for under this contract, the Contractor shall give the Contracting Officer written notice of the anticipated delay and the reasons for it. The notice and reasons shall be delivered promptly after the condition creating the anticipated delay becomes known to the Contractor but in no event less than 45 days before the completion date specified in this contract, unless otherwise permitted by the Contracting Officer. When notice is given, the Contracting Officer may extend the time specified in the Schedule for such period as is deemed advisable.

(End of clause)

[END OF SECTION F]

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION G

Clause G.2 at the beginning of this Section is incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

1852.227-70 New Technology. (MAY 2002) (applies to other than small business and nonprofits)

(End of clause)

G.2 ARC 52.232-90 Submission of Invoices (JUN 2008) (MODIFIED JAN 2012)

(a) Invoices shall be prepared and submitted to the designated billing and payment office noted below in accordance with FAR 52.232.25 Prompt Payment clause:

NASA Shared Services Center (NSSC)
Financial Management Division (FMD)—Accounts Payable
Bldg. 1111, Road C
Stennis Space Center, MS 39529

Invoices shall include the Contractor's Taxpayer Identification Number (TIN). Electronic submission is preferred, via email NSSC-AccountsPayable@nasa.gov or fax 866-209-5415. A copy of the invoice shall be provided to the Contracting Officer.

(b) In the event that amounts are withheld from payment in accordance with the New Technology clause or other provisions of this contract, a separate invoice for the amount withheld shall be required before payment of that amount is made.

(c) This Contract ☒ does ☐ does not provide for partial payments. If applicable, payments will be made in accordance with the following schedule:

Payment will be made for separately priced items which have been received and accepted by NASA, and upon receipt of a payable invoice submitted in accordance with this clause.

(End of clause)

G.3 1852.227-72 Designation of New Technology Representative and Patent Representative. (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights - Retention by the Contractor (Short Form)," whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

New Technology Representative NASA Ames Research Center M/S 202A-3 (Code VP) Moffett Field, CA 94035-0001	Patent Representative NASA Ames Research Center M/S 202A-4 (Code DL) Moffett Field, CA 94035-0001
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(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring

a "New Technology" clause or "Patent Rights - Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

G.4 1852.242-70 Technical Direction. (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that -

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;
- (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

(c) All technical direction shall be issued in writing by the COTR.

(d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) of this clause, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is -

- (1) Rescinded in its entirety; or
- (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.

(e) A failure of the Contractor and contracting officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

(f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of Clause)

[END OF SECTION G]

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION H

Clause(s) at the beginning of this Section are incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

1852.223-72 Safety and Health (Short Form). (APR 2002)

(End of clause)

H.2 1852.225-70 Export Licenses. (FEB 2000)

(a) The Contractor shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(b) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at NASA Ames Research Center, Moffett Field, CA 94035, where the foreign person will have access to export-controlled technical data or software.

(c) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

(End of clause)

H.3 ARC 52.227-93 Management and Protection of Data. (JUL 1988)

(a) In the performance of this contract it is anticipated that the Contractor may have access to, be furnished, use, or generate the following types of data (recorded information):

- (1) data submitted to the Government with limited rights or restricted rights notices;
- (2) data of third parties which the Government has agreed to handle under protective arrangements; and
- (3) data generated by or on behalf of the Government which the Government intends to control the use and dissemination thereof.

(b) In order to provide management appropriate for protecting the interests of the Government and other owners of such data, the Contractor agrees with respect to data in category (a)(1) above, and with respect to any data in categories (a)(2) and (a)(3) when so identified by the Contracting Officer, to:

- (1) use and disclose such data only to the extent necessary to perform the work required under this contract, with particular emphasis on restricting disclosure of the data to those persons who have a definite need for the data in order to perform under this contract;
- (2) not reproduce the data unless reproduction of the data is specifically permitted elsewhere in the contract or by the Contracting Officer;
- (3) refrain from disclosing the data to third parties without the written consent of the Contracting Officer; and
- (4) return or deliver the data including all copies thereof to the Contracting Officer or his designated recipient when requested by the Contracting Officer.

(End of Clause)

H.4 ARC 52.227-96 Handling of Data. (JUN 1989)

(a) Paragraph (d)(1) of the "Rights in Data--General" clause of this contract permits the Government to restrict the Contractor's right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of the contract provided such restriction is expressly set forth in the contract. Pursuant to this authority, the following restrictions shall apply to such data and shall be included, in substance, in all subcontracts:

(b) Data specifically used.

(1) In the performance of this contract, it is anticipated the Contractor may have access, or be furnished, data (including financial, administrative, cost or pricing, or management information as well as technical data or computer software) of third parties which the Government has agreed to handle under protective arrangements, as well as such Government data for which the Government intends to control the use and dissemination.

(2) In order to protect the interests of the Government and the owners of such data, the Contractor agrees, with respect to such third party or Government data that is either marked with a restrictive legend or specifically identified in this contract or in writing by the Contracting Officer as being subject to this clause, to use and disclose such data only to the extent necessary to perform the work required under this contract, preclude disclosure of such data outside the Contractor's organization, and return or dispose of such data as directed by the Contracting Officer when the data is no longer needed for contract performance.

(3) Notwithstanding (2) above, the Contractor shall not be restricted in the use and disclosure of any data that becomes generally available without breach of this clause by this Contractor, is known to or is developed by the Contractor independently of any disclosure of proprietary, restricted, or confidential data hereunder, or is rightfully received by the Contractor from a third party without restriction.

(c) Data first produced.

Data first produced by the Contractor under this contract may include data for which the Government wants to control the use and dissemination. The Contracting Officer may require, or this contract may presently specify, that the Contractor apply restrictive legends to such identified data prior to delivery to the Government, or to third parties at the Government's direction, that restrict the use and disclosure of the data by any third party recipient. However, such restrictive legends shall in no way affect the Contractor's or the Government's rights to such data as provided in the "Rights in Data--General" clause of this contract.

(End of Clause)

H.5 ARC 52.227-97 Subcontracting and Data Rights. (NOV 2010)

(a) The Contractor shall flow down the data rights provisions of this contract to lower tier subcontractors to ensure that it can fulfill its data rights obligations to the Government. See Clause FAR 52.227-14(h), *Rights in Data—General*. The Contractor shall be held responsible to obtain rights for the Government where it fails to fulfill such obligations.

(b) Pursuant to Clause FAR 52.227-14(c)(2), the Contractor must obtain Contracting Officer approval before incorporating any data not first produced under the Contract into data delivered under the contract. Before delivering such data, the Contractor must identify it and grant the Government, or acquire on its behalf, the broad licenses required by subparagraph (c) of the *Rights in Data—General* clause.

(End of Clause)

[END OF SECTION H]

SECTION I - CONTRACT CLAUSES

I.1 CLAUSES INCORPORATED BY REFERENCE -- SECTION I

Clause(s) I.1 through I.64 at the beginning of this Section are incorporated by reference, with the same force and effect as if they were given in full text. Clauses incorporated by reference which require a fill-in by the Government include the text of the affected paragraph(s) only. This does not limit the clause to the affected paragraph(s). The Contractor is responsible for understanding and complying with the entire clause. The full text of the clause is available at the addresses contained in clause 52.252-2, Clauses Incorporated by Reference, of this contract.

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

52.202-1 Definitions. (JUL 2004)

52.203-3 Gratuities. (APR 1984)

52.203-5 Covenant Against Contingent Fees. (APR 1984)

52.203-6 Restrictions on Subcontractor Sales to the Government. (SEP 2006)

52.203-7 Anti-Kickback Procedures. (OCT 2010)

52.203-8 Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity. (JAN 1997)

52.203-10 Price or Fee Adjustment for Illegal or Improper Activity. (JAN 1997)

52.203-12 Limitation on Payments to Influence Certain Federal Transactions. (OCT 2010)

52.204-4 Printed or Copied Double-Sided on Recycled Paper. (AUG 2000)

52.204-7 Central Contractor Registration. (APR 2008)

52.204-10 Reporting Executive Compensation and First-Tier Subcontract Awards. (JUL 2010)

52.209-6 Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (DEC 2010)

52.211-5 Material Requirements. (AUG 2000)

52.215-2 Audit and Records - Negotiation. (OCT 2010)

52.215-8 Order of Precedence - Uniform Contract Format. (OCT 1997)

52.215-14 Integrity of Unit Prices. (OCT 2010)

52.215-17 Waiver of Facilities Capital Cost of Money. (OCT 1997)

52.217-7 Option for Increased Quantity – Separately Priced Line Items (MAR 1989) (insert “*within the period of performance of the contract*”)

52.219-8 Utilization of Small Business Concerns. (JAN 2011)

52.219-28 Post-Award Small Business Program Representation. (APR 2009)

52.222-3 Convict Labor. (JUN 2003)

52.222-19 Child Labor - Cooperation with Authorities and Remedies. (JUL 2010)

52.222-21 Prohibition of Segregated Facilities. (FEB 1999)

52.222-26 Equal Opportunity. (MAR 2007)

52.222-35 Equal Opportunity for Veterans. (SEP 2010)

52.222-36 Affirmative Action for Workers with Disabilities. (OCT 2010)

52.222-37 Employment Reports on Veterans. (SEP 2010)

52.222-40 Notification of Employee Rights Under the National Labor Relations Act (DEC 2010)

52.222-50 Combating Trafficking in Persons. (FEB 2009)

52.222-54 Employment Eligibility Verification. (JAN 2009)

52.223-3 Hazardous Materials Identification and Material Safety Data (JAN 1997), Alt I (JUL 1995)

52.223-6 Drug-Free Workplace. (MAY 2001)

52.223-18 Contractor Policy to Ban Text Messaging While Driving. (SEP 2010)

52.225-1 Buy American Act- Supplies. (FEB 2009)

52.225-13 Restrictions on Certain Foreign Purchases. (JUN 2008)

52.227-1 Authorization and Consent. (DEC 2007)

52.227-1 Authorization and Consent. (DEC 2007) Alternate I (APR 1984)

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement. (DEC 2007)

52.227-11 Patent Rights – Ownership by the Contractor (DEC 2007)(as modified by NFS 1852.227-11 Patent Rights – Retention by the Contractor (Short Form) (applies to small businesses and nonprofits)

52.227-14 Rights in Data- General Alternate II (DEC 2007), Alternate III (DEC 2007), Alternate V (DEC 2007) (As Modified by NFS 1852.227-14, Rights in Data- General)

52.229-3 Federal, State, and Local Taxes. (APR 2003)

52.232-2 Payments Under Fixed-Price Research and Development Contracts. (APR 1984)

52.232-8 Discounts for Prompt Payment. (FEB 2002)

52.232-11 Extras. (APR 1984)

52.232-17 Interest. (OCT 2010)

52.232-23 Assignment of Claims (JAN 1986)

52.232-25 Prompt payment. (OCT 2008)

52.232-33 Payment by Electronic Funds Transfer - Central Contractor Registration. (OCT 2003)

52.233-1 Disputes. (JUL 2002) Alternate I (DEC 1991)

52.233-3 Protest after Award. (AUG 1996)

52.233-4 Applicable Law for Breach of Contract Claim. (OCT 2004)

52.242-13 Bankruptcy. (JUL 1995)

52.243-1 Changes - Fixed-Price. (AUG 1987) Alternate V (APR 1984)

52.244-6 Subcontracts for Commercial Items. (OCT 2010)

52.246-23 Limitation of Liability (FEB 1997)

52.249-2 Termination for Convenience of the Government (Fixed-Price). (MAY 2004)

52.249-8 Default (Fixed-Price Supply and Service). (APR 1984)

52.253-1 Computer Generated Forms (JAN 1991)

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

1852.219-76 NASA 8 Percent Goal. (JUL 1997)

1852.227-11 Patent Rights – Retention by the Contractor (Short Form) (applies to small businesses and nonprofits)

1852.235-70 Center for AeroSpace Information. (DEC 2006)

(End of clause)

I.2 1852.215-84 Ombudsman. (NOV 2011)

- (a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.
- (b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, whose name, address, telephone number, facsimile number, and e-mail address may be found at: http://prod.nais.nasa.gov/pub/pub_library/Omb.html. Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the Agency ombudsman identified at the above URL. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(End of clause)

I.3 1852.237-73 Release of Sensitive Information. (JUN 2005)

- (a) As used in this clause, "Sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.
- (b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor

under this contract. By submitting this proposal or performing this contract, the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c) (1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages *[insert page numbers or other identification of pages]*. Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall consider the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

[END OF SECTION I]

SECTION J - LIST OF ATTACHMENTS**LIST OF ATTACHMENTS**

The following documents are attached hereto and made a part of this contract:

Attachment No.	Title	Date	No. of Pages
1	Statement of Work entitled, “Conformal Ablative TPS Manufacturing Scale-Up”	September 20, 2012	18
2	Data Requirements List (DRL)	September 20, 2012	2

(End of Clause)

[END OF SECTION J]

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K.1 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAY 2012)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 336419.

(2) The small business size standard is 1,000 employees.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the clause at [52.204-7](#), Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the clause at [52.204-7](#) is not included in this solicitation, and the offeror is currently registered in ~~CCR~~ **SYSTEM FOR AWARD MANAGEMENT (www.sam.gov)**, and has completed the ~~ORCA~~ (representations and certifications) electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (d) applies.

☐ (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) [52.203-2](#), Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in [Part 13](#);

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) [52.203-11](#), Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) [52.204-3](#), Taxpayer Identification. This provision applies to solicitations that do not include the clause at [52.204-7](#), Central Contractor Registration.

(iv) [52.204-5](#), Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) [52.209-2](#), Prohibition on Contracting with Inverted Domestic Corporations—Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, 2010, or 2012.

(vi) [52.209-5](#), Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) [52.214-14](#), Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(viii) [52.215-6](#), Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(ix) [52.219-1](#), Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(x) [52.219-2](#), Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xi) [52.222-22](#), Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at [52.222-26](#), Equal Opportunity.

(xii) [52.222-25](#), Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at [52.222-26](#), Equal Opportunity.

(xiii) [52.222-38](#), Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) [52.223-1](#), Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at [52.223-2](#), Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) [52.223-4](#), Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xvi) [52.225-2](#), Buy American Act Certificate. This provision applies to solicitations containing the clause at [52.225-1](#).

(xvii) [52.225-4](#), Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at [52.225-3](#).

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$77,494, the provision with its Alternate II applies.

(D) If the acquisition value is \$77,494 or more but is less than \$100,000, the provision with its Alternate III applies.

(xviii) [52.225-6](#), Trade Agreements Certificate. This provision applies to solicitations containing the clause at [52.225-5](#).

(xix) [52.225-20](#), Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.

(xx) [52.225-25](#), Prohibition on Contracting with Entities Engaging in Sanctioned Activities Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxi) [52.226-2](#), Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at [52.219-23](#), Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

— (i) [52.219-22](#), Small Disadvantaged Business Status.

___ (A) Basic.

___ (B) Alternate I.

___ (ii) [52.222-18](#), Certification Regarding Knowledge of Child Labor for Listed End Products.

___ (iii) [52.222-48](#), Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

___ (iv) [52.222-52](#), Exemption from Application of the Service Contract Act to Contracts for Certain Services—Certification.

___ (v) [52.223-9](#), with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA—Designated Products (Alternate I only).

___ (vi) [52.227-6](#), Royalty Information.

___ (A) Basic.

___ (B) Alternate I.

X (vii) [52.227-15](#), Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SYSTEM FOR AWARD MANAGEMENT (SAM) website accessed through <https://www.acquisition.gov>. **CONTRACTING OFFICER'S NOTE: NEW WEBSITE REPLACING CCR/ORCA IS: www.sam.gov.** After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR [4.1201](#)); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE #	TITLE	DATE	CHANGE

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)

K.2 52.227-15 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE (DEC 2007)

(a) This solicitation sets forth the Government's known delivery requirements for data (as defined in the clause at [52.227-14](#), Rights in Data—General). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at [52.227-16](#), if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data—General clause at [52.227-14](#) included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data instead. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.

(b) By completing the remainder of this paragraph, the offeror represents that it has reviewed the requirements for the delivery of technical data or computer software and states [*offeror check appropriate block*]

[] (1) None of the data proposed for fulfilling the data delivery requirements qualifies as limited rights data or restricted computer software; or

[] (2) Data proposed for fulfilling the data delivery requirements qualify as limited rights data or restricted computer software and are identified as follows:

(c) Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of the data should a contract be awarded to the offeror.

(End of provision)

[END OF SECTION K]

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS**L.1 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.acquisition.gov/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

(End of Provision)

L.2 LISTING OF PROVISIONS INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

CLAUSE NUMBER	DATE	TITLE
52.211-14	APR 2008	NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE; Insert " <u>DO-C9</u> rated order" in blank.
52.214-34	APR 1991	SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE
52.214-35	APR 1991	SUBMISSION OF OFFERS IN U.S. CURRENCY
52.215-1	JAN 2004	INSTRUCTIONS TO OFFERORS - COMPETITIVE ACQUISITION
52.217-5	JUL 1990	EVALUATION OF OPTIONS
52.232-38	MAY 1999	SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS

CLAUSE NUMBER	DATE	TITLE
1852.227-71	APR 1984	REQUESTS FOR WAIVER OF RIGHTS TO INVENTIONS
1852.227-84	DEC 1989	PATENT RIGHTS CLAUSES
1852.228-80	SEP 2000	INSURANCE - IMMUNITY FROM TORT LIABILITY

(End of Provision)

L.3 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award under this solicitation of a Firm-Fixed-Price contract.

(End of Provision)

L.4 52.233-2 SERVICE OF PROTEST (SEPT 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from:

Marianne Shelley
NASA Ames Research Center
Mail Stop 241-1
Moffett Field, CA 94035-0001

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of Provision)

L.5 PROPOSAL PREPARATION--GENERAL INSTRUCTIONS

The proposal shall be submitted to NASA via email in portable document format (PDF) or Microsoft Office (Word or Excel), with a maximum file size of 10 MB. Pages shall be single spaced using no less than 10-point Times New Roman or Arial font with a one inch border minimum on all sides. All proposals will be submitted in four volumes (four separate electronic files) as described below.

VOL I - OFFER (No Page Limitation)

Include a cover letter that includes a signed acknowledgement of any solicitation amendments. Provide DUNS # and CAGE code to be used to verify contractor's records in federal acquisition and administrative databases. Include names, telephone numbers, and email addresses of persons to be contacted for both technical and contractual questions. Include SF33 Solicitation, Offer, and Award (posted with this solicitation) that must be signed by an official authorized to contractually bind your company. . Blocks 14 through 18 of the SF 33 shall be completed. Include Section K, Representations and Certifications.

VOL II- MISSION SUITABILITY (Not to Exceed 25 Pages)

SUBFACTOR A - TECHNICAL CAPABILITIES

Offerors shall submit a document that specifically demonstrates the contractor's current experience, infrastructure, and capabilities in the following areas:

1. Offeror's current capability in heat shield relevant (aerospace grade) TPS manufacturing:
 - a. Floor space, infiltrating vessels and vacuum/ovens necessary manufacture the proposed TPS to the 1-meter scale
 - b. Personnel experienced in making aerospace grade materials
 - c. Personnel experienced in designing necessary tooling needed to make MDU
 - d. Personnel experienced in appropriate NDE to evaluate material uniformity
 - e. Associated product assurance certifications and processing equipment necessary to do so
 - f. Certifiable process procedures and specifications
2. Offeror's experience manufacturing *phenolic*-based polymer composites
3. Offeror's experience working with carbon felts and felt composites
4. Offeror's experience infiltrating resin/solvent into parts >1-meter diameter; materials will need to be processed in molds in conically shaped (45°, 1-meter base diameter). Contractor shall design and acquire the molds.
5. Offeror's ability to **vacuum infiltrate** and then **remove** large volumes of solvent (*ethylene glycol*) from infiltrated parts prior to and/or during curing (Typical cure conditions 170-200°C and 1 Torr).
6. Capabilities in Non-Destructive Evaluation (NDE) techniques available to inspect TPS prior to delivery to NASA

7. Offeror's ability to procure necessary chemicals and conduct appropriate quality checks.
8. Offeror's ability to procure necessary felt materials and conduct appropriate quality checks.
9. Offeror's ability to take NASA-provided processing specification to scale up infiltration process as needed.
10. Technical feasibility of offered material scale-up process.

SUBFACTOR B: PROGRAM MANAGEMENT

11. Indicate Offeror's agreement and ability to sign a Non-Disclosure Agreement (NDA) for receipt of Government-sensitive information regarding processing of NASA-developed TPS materials to be manufactured under this contract.
12. Proposal shall include the offeror's proposed Project Schedule including the delivery schedule for the contract deliverables.
13. Resumes of key personnel, no more than one page per key person.

VOL III- PAST PERFORMANCE (Not to Exceed 10 Pages)

Offerors shall submit relevant information that describes the offeror's past experience manufacturing heat shield relevant (aerospace grade) TPS delivered to Government customers. Provide information on at least three (3) previous contracts of similar scope and magnitude. Past performance references must be recent and relevant. Include contract numbers, government agency, dates of performance, and a brief description of the work and the total dollar value of the contract. The Past Performance volume shall not be more than 10 Pages.

The Contracting Officer may also access past performance information through the Contractor Performance Assessment Reporting System (CPARS) or similar systems of other Government departments and agencies, questionnaires tailored to the circumstances of this acquisition, Defense Contract Management Agency (DCMA) channels, interviews with Program Managers and Contracting Officers, and other sources known to the Government, including commercial sources. Offerors are notified that, in conducting an assessment of past performance, the Government reserves the right to use both data provided by the Offeror and data obtained from other sources. Offerors without a record of past performance or for whom past performance information is not available, will not be evaluated favorably or unfavorably.

VOL IV- PRICE PROPOSAL (No page limit)

Offerors shall complete the itemized Pricing List, a separate document posted with this solicitation. A separate firm-fixed price is required for each deliverable.

(a) The Contractor shall provide all resources (except as may be expressly stated in the contract as furnished by the Government) necessary to deliver and/or perform the items below in accordance with the Description/Specifications/Statement of Work incorporated in Section C.

Item No.	Description	Delivery Date	Qty	Unit	Unit Price	Total Price
HARDWARE REQUIREMENTS:						
001	Material Prop (HR-01)	1/28/13	2	EA		
002	SPRITE (HR-02) (NASA to provide molds)	1/28/13	24	EA		
003	SPRITE TC Plug (HR-02B) (Vendor to provide machined TPS only, no instrumentation)	1/28/13	24	EA		
004	MDU-Gore (HR-03)	5/31/13	5	EA		
005	MDU-Nose (HR-04)	5/31/13	2	EA		

DATA REQUIREMENTS:						
006	Heatshield Manufacturing Databook, DR-001. (SOW Section 5.0)	7/31/13	1	EA	\$_____	\$_____

(b) OPTION ITEMS

If Option Items are exercised pursuant to Clause 52.217-7, —OPTION FOR INCREASED QUANTITY – SEPARATELY PRICED LINE ITEM (incorporated by reference, Section I), the contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Description/Specification/Work Statement in Section C.

Item No.	Description	Delivery Date	Qty	Unit	Unit Price	Total Price
007	Conformal TPS Material Properties, DR-002 (SOW Section 5.0)	5/31/13	1	EA	\$_____	\$_____

EMAIL OFFERS TO:

Offers will be accepted electronically (only) and shall be sent only to the email addresses listed below:

Marianne.Shelley@nasa.gov

Note: Failure to follow these instructions may render contractor's submittal as "non-responsive". All proposal volumes shall be submitted to the above address NO LATER THAN the date and time in Block 9 of the SF33.

LATE SUBMISSION: Any volume submitted after the specified time will cause the entire proposal to be considered late in accordance with provision FAR 52.215-1, "Instructions to Offerors–Competitive."

(End of Clause)

L.6 PROTESTS TO NASA (NFS 1852.233-70) (OCT 2002)

Potential bidders or offerors may submit a protest under 48 CFR Part 33 ([FAR Part 33](#)) directly to the Contracting Officer. As an alternative to the Contracting Officer's consideration of a protest, a potential bidder or offeror may submit the protest to the Assistant Administrator for Procurement, who will serve as or designate the official responsible for conducting an independent review. Protests requesting an independent review shall be addressed to Assistant Administrator for Procurement, NASA Code H, Washington, DC 20546-0001.

(End of provision)

[END OF SECTION L]

SECTION M- EVALUATION FACTORS FOR AWARD

M.1 SOURCE SELECTION AND EVALUATION FACTORS--GENERAL

1. Source Selection

This competitive negotiated acquisition shall be conducted in accordance with FAR 15.3, "Source Selection", and NASA FAR Supplement (NFS) 1815.3, "Source Selection". The Source Evaluation Board procedures at NFS 1815.370, "NASA source evaluation boards" will not apply.

The attention of offerors is particularly directed to NFS 1815.305, "Proposal evaluation" and to NFS 1815.305-70, "Identification of unacceptable proposals".

A trade-off process, as described at FAR 15.101-1, will be used in making source selection.

2. Evaluation Factors and Subfactors

The evaluation factors are Mission Suitability, Price, and Past Performance. These factors, as described at NFS 1815.304-70, will be used to evaluate each proposal. This Section M provides a further description for each evaluation factor, inclusive of subfactors. Only the Mission Suitability factor is numerically scored.

3. Relative Order of Importance of Evaluation Factors

The Price Factor is less important than the combined importance of the Mission Suitability Factor and the Past Performance Factor. As individual Factors, the Price Factor is less important than the Mission Suitability Factor but more important than the Past Performance Factor.

(End of Text)

M.2 MISSION SUITABILITY FACTOR

The Government will evaluate the offeror's understanding and technical approach to meeting the requirements of the Statement of Work (SOW). The Government will evaluate the effectiveness of the offeror's proposed techniques and procedures, and the methodology proposed for meeting the requirements. The Mission Suitability evaluation will take into consideration whether the resources proposed are consistent with the proposed efforts or whether they are overstated or understated for the effort to be accomplished. The offeror's justification for the proposed resources will be considered in this evaluation. If the offeror's proposal demonstrates a lack of resource realism, it will be evaluated as demonstrating a lack of understanding of the requirements. Specifically, NASA will evaluate the offeror's proposal for the following:

SUBFACTOR A: TECHNICAL CAPABILITIES

1. Evaluation of offeror's current capability in heat shield relevant (aerospace grade) TPS manufacturing:
 - a. Floor space, infiltrating vessels and vacuum/ovens necessary manufacture the proposed TPS to the 1-meter scale
 - b. Personnel experienced in making aerospace grade materials
 - c. Personnel experienced in designing necessary tooling needed to make MDU
 - d. Personnel experienced in appropriate NDE to evaluate material uniformity
 - e. Associated product assurance certifications and processing equipment necessary to do so
 - f. Certifiable process procedures and specifications
2. Evaluation of offeror's experience manufacturing *phenolic*-based polymer composites
3. Evaluation of offeror's experience working with carbon felts and felt composites

4. Evaluation of offeror's experience infiltrating resin/solvent into parts >1-meter diameter; materials will need to be processed in molds in conically shaped (45°, 1-meter base diameter). Contractor shall design and acquire the molds.
5. Evaluation of offeror's ability to **vacuum infiltrate** and then **remove** large volumes of solvent (*ethylene glycol*) from infiltrated parts prior to and/or during curing (Typical cure conditions 170-200°C and 1 Torr).
6. Evaluation of offeror's capabilities in Non-Destructive Evaluation (NDE) techniques available to inspect TPS prior to delivery to NASA
7. Evaluation of offeror's ability to procure necessary chemicals and conduct appropriate quality checks.
8. Evaluation of offeror's ability to procure necessary felt materials and conduct appropriate quality checks.
9. Evaluation of offeror's ability to take NASA-provided processing specification to scale up infiltration process as needed.
10. Technical feasibility of offered material scale-up process.

SUBFACTOR B: PROGRAM MANAGEMENT

1. Evaluation of offeror's agreement and ability to sign a Non-Disclosure Agreement (NDA) for receipt of Government-sensitive information regarding processing of NASA-developed TPS materials to be manufactured under this contract.
2. Evaluation of the offeror's proposed Project Schedule including the delivery schedule for the contract deliverables.
3. Evaluation of the capabilities and experience of offeror's key personnel.

Evaluation Findings

The Government will evaluate each proposal by classifying findings as strengths, weaknesses, significant strengths, significant weaknesses, or deficiencies using the following definitions:

Weakness – a flaw in the proposal that increases the risk of unsuccessful contract performance

Significant Weakness – a proposal flaw that appreciably increases the risk of unsuccessful contract performance

Deficiency – a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level

Strength – a proposal area that enhances the potential for successful performance or contributes toward exceeding the contract requirements in a manner that provides additional value to the government (this could be associated with a process, technical approach, materials, facilities, etc.).

Significant Strength – a proposal area that greatly enhances the potential for successful performance or contributes significantly toward exceeding the contract requirements in a manner that provides additional value to the government.

3. Weights and Scoring

In accordance with NFS 1815.304-70(b)(1), the Mission Suitability factor will be weighted and scored on a 1000 point scale. The weights (points) associated with each Mission Suitability subfactors are as follows:

	Subfactor Description	<u>Points</u>
Subfactor A	TECHNICAL CAPABILITIES	700
Subfactor B	PROGRAM MANAGEMENT	300
	Total	1000

The Mission Suitability subfactors will be evaluated using the adjectival rating, definitions, and percentile ranges at NFS 1815.305(a)(3)(A) (see below). The maximum points available for each subfactor will be multiplied by the assessed percent for each subfactor to derive the score for the particular subfactor. For example, if a subfactor has possible 700 points and receives a percent rating 80, then the score for that subfactor would be 560 points.

Mission Suitability subfactors and the total Mission Suitability factor will be evaluated using the following adjectival ratings, definitions, and percentile ranges:

ADJECTIVAL RATING	DEFINITIONS	PERCENTILE RANGE
Excellent	A comprehensive and thorough proposal of exceptional merit with one or more significant strengths. No deficiency or significant weakness exists.	91-100
Very Good	A proposal having no deficiency and which demonstrates over-all competence. One or more significant strengths have been found, and strengths outbalance any weaknesses that exist.	71-90
Good	A proposal having no deficiency and which shows a reasonably sound response. There may be strengths or weaknesses, or both. As a whole, weaknesses not off-set by strengths do not significantly detract from the offeror's response.	51-70
Fair	A proposal having no deficiency and which has one or more weaknesses. Weaknesses outbalance any strengths.	31-50
Poor	A proposal that has one or more deficiencies or significant weaknesses that demonstrate a lack of overall competence or would require a major proposal revision to correct.	0-30

(End of text)

M.3 PAST PERFORMANCE EVALUATION FACTOR

For purposes of this provision, "offeror" includes the prime offeror together with any significant subcontractors. Overall ratings will be based on the combined past performance of the prime and all significant subcontractors. The Past Performance factor will evaluate each offeror's record of performing services or delivering products that are similar in size, content, and complexity to the requirements of this solicitation. The overall confidence rating assigned to Past Performance (see below) will reflect a subjective evaluation of the information contained in the written narrative; and other references, if any, that the Government may contact for additional past performance information. Offerors without a record of relevant past performance, or for whom information on past performance is not available, shall receive a neutral rating in accordance with FAR 15.305(a)(2)(iv).

Past Performance Ratings – The level of confidence ratings set forth below will be used to evaluate the Past Performance factor for each offeror.

Each of the adjective ratings below has a "performance" component and a "relevance" component. The following adjectival rating guidelines will be used when subjectively assessing both components. In assessing relevance, the Government will consider the degree of similarity in size, content, and complexity to the requirements in this solicitation, as well as how current is the past performance.

In assessing performance, the Government will make an assessment of the offeror's overall performance record. The Government will evaluate the offeror's past performance record for meeting technical; schedule; cost; management and other contract requirements.

Very High Level of Confidence

The Offeror's relevant past performance is of exceptional merit and is very highly pertinent to this acquisition; indicating exemplary performance in a timely, efficient, and economical manner; very minor (if any) problems with no adverse effect on overall performance. Based on the Offeror's performance record, there is a very high level of confidence that the Offeror will successfully perform the required effort.

High Level of Confidence

The Offeror's relevant past performance is highly pertinent to this acquisition; demonstrating very effective performance that would be fully responsive to contract requirements with contract requirements accomplished in a timely, efficient, and economical manner for the most part with only minor problems with little identifiable effect on overall performance. Based on the Offeror's performance record, there is a high level of confidence that the Offeror will successfully perform the required effort.

Moderate Level of Confidence

The Offeror's relevant past performance is pertinent to this acquisition, and it demonstrates effective performance; fully responsive to contract requirements; reportable problems, but with little identifiable effect on overall performance. Based on the Offeror's performance record, there is a moderate level of confidence that the Offeror will successfully perform the required effort.

Low Level of Confidence

The Offeror's relevant past performance is at least somewhat pertinent to this acquisition, and it meets or slightly exceeds minimum acceptable standards; adequate results; reportable problems with identifiable, but not substantial, effects on overall performance. Based on the Offeror's performance record, there is a low level of confidence that the Offeror will successfully perform the required effort. Changes to the Offeror's existing processes may be necessary in order to achieve contract requirements.

Very Low Level of Confidence

The Offeror's relevant past performance does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; problems in one or more areas which, adversely affect overall performance. Based on the Offeror's performance record, there is a very low level of confidence that the Offeror will successfully perform the required effort.

Neutral

In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available, the Offeror may not be evaluated favorably or unfavorably on past performance [see FAR 15.305(a) (2) (ii) and (iv)].

(End of provision)

M.4 PRICE EVALUATION FACTOR

This is a firm fixed price acquisition.

(1) The Government will conduct Price Proposal evaluations in accordance with Section 15.4 of the FAR. Particular attention shall be given to FAR 15.404-1(b) entitled Price Analysis. Elements of FAR 15.404-1(b) that shall be considered include comparison of proposed prices received in response to the solicitation and comparison of proposed prices with independent Government cost estimates.

(2) Price Proposal evaluations shall also include an analysis for unbalanced pricing as referenced in FAR 15.404-1(g). A determination of unbalanced pricing may lead to the rejection of the offeror as permitted in FAR 15.404-1(g)(3).

(3) Relatively low prices will also be evaluated to determine whether there is a risk of default in the event of award to that offeror. If the Government determines that there is an unreasonably high risk of default, such a determination may serve as the basis for non-selection.

(4) Any programmatic risk to mission success, e.g., technical, schedule, cost, safety, occupational health, security, export control, or environmental, will be evaluated. Risks may result from the offeror's technical approach, manufacturing plan, selection of materials, processes, equipment, or as a result of the cost, schedule, and performance impacts associated with its approach. Risk evaluations shall consider the probability of the risk occurring, the impact and severity of the risk, the timeframe when the risk should be addressed, and the alternatives available to meet the requirements. Risk assessments shall be captured as part of strengths, weaknesses, deficiencies, and numerical or adjectival ratings. Identified risks and the potential for cost impact shall be considered in the price evaluation.

(5) The overall price for evaluation purposes will be the sum of the prices proposed for Contract Line Items 001, 002, 003, 004, 005, and 006 in Section B.1 of the solicitation. The Government will review the option price for Item 007 in accordance with FAR 52.217-5, Evaluation of Options.

(6) Evaluation of options shall not obligate the Government to exercise such options.

(End of provision)

[END OF SECTION M]